IN THE UNITED STATES PATENT AND TRADEMARK OFFICE BEFORE THE BOARD OF PATENT APPEALS AND INTERFERENCES (MBHB Docket No. 03-509-A)

In the Application of:)
Matichuk et al.) Confirmation No.: 8244
Serial No. 09/972,424) Group Art Unit: 2145) Examiner: A. Choudhury
Filed: October 4, 2001)
For: One Click Web Records)
Mail Stop Appeal Brief - Patents Commissioner for Patents P.O. Box 1450 Alexandria, Virginia 22313-1450	

APPEAL BRIEF

i

Jeffrey A. Steck McDONNELL BOEHNEN HULBERT & BERGHOFF LLP 300 South Wacker Drive Chicago, Illinois 60606 (312) 913-0001

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE BEFORE THE BOARD OF PATENT APPEALS AND INTERFERENCES (MBHB Docket No. 03-509-A)

In the Application of:)
Matichuk et al.) Confirmation No.: 8244
Matichiak et al.) Group Art Unit: 2145
Serial No. 09/972,424) Examiner: A. Choudhurv
Filed: October 4, 2001)
For: One Click Web Records)
Mail Stop Appeal Brief - Patents Commissioner for Patents P.O. Box 1450 Alexandria, Virginia 22313-1450	

APPEAL BRIEF

Dear Sir:

This Appeal Brief is submitted pursuant 37 C.F.R. § 41.37, within one month from the December 12, 2007, mailing date of the Notice of Panel Decision from Pre-Appeal Brief Review. The Office is authorized to charge the large entity Appeal-Brief fee (\$510.00) to Deposit Account No. 132490 and is generally in this matter authorized to charge any underpayment or credit any overpayment to the same deposit account.

MICDONNELL BOEHNEN HULBERT & BERGHOFF LLP 300 SOUTH WACKER DRIVE CHICAGO, ILLINOIS 60606 TELEPHONE (312) 913-0001

Table of Contents

l.	Real Party in Interest	. 1
II.	Related Appeals and Interferences	1
III.	Status of Claims	1
IV.	Status of Amendments	1
٧.	Summary of Claimed Subject Matter	1
VI.	Grounds of Rejection to Be Reviewed on Appeal	5
VII.	Argument	5
Claims	Appendix	13
Eviden	ce Appendix	22
Related	d Proceedings Appendix	23

I. REAL PARTY IN INTEREST

The real party in interest is The DIRECTV Group, Inc., to which this invention is assigned.

II. RELATED APPEALS AND INTERFERENCES.

Applicant is not aware of any related appeals or interferences.

III. STATUS OF CLAIMS

Claims 1-40 are pending, rejected, and all under appeal. A clean set of the pending claims is

attached in the Claims Appendix.

IV. STATUS OF AMENDMENTS

No amendments were filed subsequent to the final rejection.

V. SUMMARY OF CLAIMED SUBJECT MATTER

A. Overview

The claims on appeal relate to systems and methods that simultaneously address two

problems: helping viewers to record broadcast programs, and helping broadcasters to promote

those programs. In one example, when a user clicks on a Web-based advertisement for a broadcast

program, the viewer's digital video recorder is remotely programmed to record that program when it

is broadcast. Thus, in this example, a viewer can quickly program a recorder in one location (e.g., at

home) even when the viewer is in a different location (e.g., at work).

The independent claims at issue are summarized in the following sections, with reference to

the specification to which they are appended. The references to the specification provide examples

of the claim element for which they are provided; those claim elements should not be understood as limited to the referenced examples, nor should the claims be understood as limited to the embodiments of which the referenced examples are a part.

B. Independent Method Claims

Independent **claim 1** recites a method of programming a media-based device over a network. An advertisement is enabled to be provided on a first web site (Page 82, lines 6-7; Fig. 32, element 604; Fig. 33, step 608.) This advertisement is for a broadcast program. The broadcast program is scheduled to be broadcast at a predetermined start time. (Page 82, lines 6-7; Fig. 32, element 602 ("tonight at 9PM").) The method further enables selection of the advertisement. In response to selection of the advertisement (Page 82, lines 10-14; Fig. 33, step 614), the method allows automatic programming (Fig. 33, step 622) of the media-based device to record the broadcast program at the predetermined start time (Page 82, lines 10-11; Fig. 33, step 624).

Independent **claim 19** recites a method of programming a media-based device to record content through a web-based application. This method makes use of an advertisement for a broadcast program (Fig. 32, element 604; Fig. 33, step 608), where the broadcast program is scheduled to be aired at a predetermined start time. (Fig. 32, element 602 ("tonight at 9PM").) The method involves receiving a selection of that advertisement. (Fig. 33, step 614.) From the selection, identification information is extracted (Page 82, lines 3-6; Fig. 33, step 616), where the identification information is associated with a user making the selection and with the broadcast program. In response to the user selection, a source web service is accessed. (Fig. 33, step 616) The method includes logging into the source web service using the identification information. (Fig. 33, step 620.)

program selected at the predetermined start time. (Page 82, lines 10-11; Fig. 33, step 622; Fig. 32, element 602.)

Independent **claim 24** recites a computer-implemented method for controlling a media-based device through a virtual browser. The virtual browser receives from a client system a selection of an advertisement of a broadcast program to be aired (Fig. 32, element 604; Fig. 33, step 608). The virtual browser extracts identification information associated with a user making the selection and with the broadcast program. (Page 82, lines 36; Fig. 33, step 616.) The virtual browser accesses an online web service using the identification information. (Fig. 33, step 620.) The virtual browser then invokes the media-based device to record the broadcast program selected, wherein the media-based device is different from the client system. (Page 82, lines 10-11; Fig. 33, step 622; Fig. 32, element 602.)

Independent **claim 29** recites a method for programming a media-based device that is network enabled. The method involves receiving from a client system a user command that causes a first server to access a second server. The first server transmits identifying information of the user to the second server. (Page 82, lines 3-6; Fig. 33, step 616.) The second server authenticates the user based on the identifying information. The second server then accesses the media-based device to program the media-based device with the identifying information. (Page 82, lines 10-11; Fig. 33, step 622; Fig. 32, element 602.) The media-based device is different from the client system.

C. Independent Apparatus and Article of Manufacture Claims

Independent **claim 33** recites a multi-component system. One component is a client-side system. (Page 82, line 18 – page 83, line 1; Fig. 2, element 18; Fig. 2, element 28.) The client-side system is enabled to allow selection of an online advertisement for a broadcast program while

navigating a first web site. (Fig. 32, element 604; Fig. 33, step 608.) The broadcast program is scheduled to be broadcast at a predetermined start time. (Fig. 32, element 602 ("tonight at 9PM").) Another component is a server side system. The server side system is enabled to automatically program a media-based device to record the broadcast program after selection of the online advertisement. (Page 82, lines 10-11; Fig. 33, step 622; Fig. 32, element 602.) The media-based device is communicatively coupled to the server side system over a network in response to the advertisement being selected.

Independent **claim 35** recites a browser program product for programming a media-based device over a network. The browser program product is stored on a computer readable medium and adapted to enable an advertisement for a broadcast program to be provided on a first web site, wherein the broadcast program is scheduled to be broadcast at a predetermined start time. (Fig. 32, element 602 ("tonight at 9PM").) The browser program product enables selection of the advertisement. In response to selection of the advertisement, the browser program product allows automatic programming of the media-based device to record the broadcast program after selection of the advertisement. (Page 82, lines 10-11; Fig. 33, step 622; Fig. 32, element 602.)

Independent **claim 37** recites a computer server program product for programming a mediabased device over a network. The computer server program product is stored on a computer readable medium, and it is adapted to perform the operations of a virtual browser. The computer server program product receives a selection of an advertisement of a broadcast program (Fig. 32, element 608) to be aired at a predetermined start time. (Fig. 32, element 602 ("tonight at 9PM").) The computer server program product extracts identification information associated with a user making the selection and with the broadcast program. (Fig. 33, step 616.) The computer server program product accesses an online web service using the identification information. (Fig. 33, step

620.) The computer server program product then invokes the media-based device to record the broadcast program selected at the predetermined start time. (Page 82, lines 10·11; Fig. 33, step

622; Fig. 32, element 602.)

VI. GROUNDS OF REJECTION TO BE REVIEWED ON APPEAL

All rejections remaining on the record, namely the rejection of claims 1-40 under 35 U.S.C. §

102(e) as being anticipated by U.S. Patent No. 6,163,316 ("Killian") are appealed.

VII. ARGUMENT

Because each claim of the application contains at least one limitation not disclosed by the

sole reference relied on – U.S. Patent No. 6,163,316 ("Killian") – the claim rejections for anticipation

cannot stand.

The invention as claimed in the pending claims relates generally to a type of remote

programming of a media recorder, performed over a network such as the World Wide Web. For

example, an individual browsing the Web at his office may see on a Web page an advertisement for a

scheduled television program. The applicant's disclosure enables that individual to program his home

media recorder to record the program simply by clicking on the advertisement from his office.

Because an individual's office and his home media recorder may be widely separated, the applicant's

 $\ disclosure \ describes \ technologies \ for \ associating \ the \ user \ with \ his \ recorder. \ These \ technologies$

make use of identification information, such as digital "cookies," each of which can contain "user id and a unit serial number for the [digital video recorder] associated with the user id." Par. [00182].

Whereas the technologies described in the applicants' disclosure enable a particularly

convenient way to program one's recorder over the Web, the Killian reference merely provides a way

to program one's recorder locally. A local user of Killian's system may benefit from other capabilities of the Web: for example, program guide information can free a user from manually entering a program's start time, and the user may be able to view a Web site about a program while the program is playing. This is not the same, though, as being able to program one's recorder over the Web using the technologies disclosed by the applicant. Given the divergent goals of the applicant's disclosure versus that of Killian, it is not surprising that Killian fails to disclose each element recited in the applicant's claims. Because of these shortcomings of the Killian disclosure, described in further detail below, Killian cannot anticipate the applicant's claims, and the applicant respectfully requests reversal of the claim rejections.

A. Killian Does Not Disclose the Selection of any Advertisement

1. Claims 1-18, 40

Independent claim 1 recites the use of an "advertisement" in the programming of a media recorder. It provides for "selection of the advertisement," and programming of the media recorder is performed "in response to selection of the advertisement." Killian does not disclose any such uses of an advertisement. In particular, the only advertisements described in Killian are advertisements for products shown during a commercial break:

During a commercial break in the program, information regarding the advertised product might be retrieved from a web site associated with the product and synchronously and integrally displayed along with the commercial.

See col. 5. lines 62-66.

For example, with respect to updating integrated displays, if a program switches to a commercial break, control API 60 may cause a web page or other Internet information associated with the advertised product to be displayed on television 40 in synchronization with the displayed commercial to provide additional product information or an opportunity to order or comment on the product.

See col. 7, lines 16-22. There is no disclosure in Killian of any recording being performed or scheduled in response to any advertisement. In consequence. Killian cannot anticipate claim 1.

Claims 2:18 and 40, which depend from claim 1 and thus incorporate the "advertisement" limitation of claim 1, likewise cannot be anticipated by Killian.

2. Claims 19-28, 37-39

Independent claims 19, 24, and 37 all recite an element of "receiving ... a selection of an advertisement of a broadcast program." As noted above with respect to claim 1, Killian does not disclose any "advertisement of a broadcast program," nor any way to select any such advertisement. Consequently, the step of "receiving" such a selection is likewise not disclosed in Killian, and independent claims 19, 24, and 37 cannot be anticipated by Killian. Because the elements of independent claims 19, 24, and 37 are incorporated into their respective dependent claims, claims 19-28 and 37-39 cannot be anticipated by Killian.

3. Claims 33-36

Independent claim 33 recites a system in which a server side system couples with and programs a media-based device "in response to [an] advertisement being selected." Independent claim 35 recites that "after selection of the advertisement," the system, "in response, allow[s] automatic programming of the media-based device to record the broadcast program." In claims 33 and 35, the advertisement referred to is an "advertisement for a broadcast program." Because Killian does not disclose any "advertisement of a broadcast program," nor any way to select any such advertisement, or any action in response to such a selection, neither claims 33 and 35, nor their dependent claims 34 and 36, can be anticipated by Killian.

B. Killian Does Not Disclose the Use of Identification Information

1. Claims 19-28 and 37-39

Independent claims 19, 24, and 37 recite the extraction of "identification information" that is used for "logging into the source web service" (claim 19) or "accessing" such a service (claims 24, 37). The Office Action equates the claimed "identification information" with the "viewer profiles" described by Killian in column 10, lines 1-17. The viewer profiles described in that excerpt of Killian, however, are not used to log in to any web service; rather, they amount only to a collection of user preferences:

For each option presented to the viewer in connection with preference templates 82, preference templates 82 allow the viewer to provide ranking information that EPG 70 uses to generate viewer profile 84 and provide enhanced viewing opportunities according to viewer profile 84, as discussed more fully below. Referring to FIG. 4, genre preference template 82 includes options 86 and corresponding rankings 88 in any suitable presentation format that is viewable on television 40. In one embodiment, the viewer provides a ranking 88 for each option 86 to indicate the desirability of programming associated with option 86 according to any suitable scale, standard, or other criteria. For example, for each option 86, template 82 might include any number of circles, boxes, or other locations on template 82 that each correspond to a qualitative assessment of the degree to which the viewer will likely enjoy programming associated with option 86.

Col. 10, lines 1-17. It is not disclosed in Killian to use one's user preferences to log on to a web service. Moreover, the Office Action equates the claimed "web service" with Killian's disclosure of "an EPG applet 70 that is downloaded from the Internet to run on platform 12." Col. 8, lines 5-7. This applet, however, is not a "web service." It may originally have been downloaded from the Internet, but it is executed locally, and the tasks it performs are performed locally. By analogy, a person running a copy of Adobe Acrobat or other software on his local computer is not said to be using a "web service" merely because that software may have been purchased and downloaded over the web.

2. Claims 29-32

Independent claim 29 recites that a first server "transmit[s] identifying information of the user to the second server." As described above with respect to claims 19-28 and 37-39, Killian does not disclose the use of identifying information of a user. Moreover, Killian does not disclose the sharing of such identifying information among more than one server, such as the first and second server of claim 29. Accordingly, neither claim 29, nor its dependent claims 30-32, can be anticipated by Killian.

3. Claims 7-12

Dependent claim 7 recites the step of "enabling identification of a user selecting the advertisement" and "enabling authentication of the user with the media-based device." Because Killian's system does not involve selection of advertisements for broadcast programs, it includes no disclosure of either identifying or authenticating a user making such selections. Accordingly, claim 7 and its dependent claims 8-12 cannot be anticipated by Killian.

C. Killian Does Not Disclose the Use of Multiple Servers

1. Claim 29

Independent claim 29 recites the use of a "first server" and a "second server." The Office Action equates these servers with elements 48 and 48, respectively, of Killian. Although element 46 is a "database server," element 48 is merely the "database" that is maintained by the database server; it is not a separate server. In particular, claim 29 recites that the second server operates to "authenticat[e]" the user and to "program the media-based device." Killian, however, contains no disclosure of elements 46 or 48—or any other element—performing "authentication." Elements 46

and 48 merely provide program schedules: they do not require authentication to access these schedules, and even if their scheduling information is useful for programming the recorder of Killian, they do not themselves "access[] the media-based device to program the media-based device," as recited in claim 29. Neither independent claim 29, nor its dependent claims 30-32, can be anticipated by Killian.

2. Claims 33-34

Independent claim 33 recites that selection of the advertisement for the broadcast program is performed at "a client side system," while the automatic programming of the media-based device is performed by "a server side system." In the rejection of claim 33, the Final Office Action equated the claimed "server side system" with Killian's use of a local "EPG API" that queries a program guide database (48). Killian's program guide database, however, merely provides information on the program schedule; it does not program the media-based device. Instead, Killian discloses that the media device is programmed on the client side, by the EPG API. Accordingly, neither claim 33, nor its independent claim 34 can be anticipated by Killian.

D. Killian Does Not Disclose a Hyperlink Embedded in a Web Site

1. Claims 2-5

Dependent claim 2 recites that the advertisement for a broadcast program is a hyperlink embedded in a web site. The hyperlink disclosed by Killian (see col. 5, lines 19-21, cited in the Final Office Action) is not a hyperlink embedded in a web site. Instead, it is a hyperlink stored in "channel mapping information." See col. 5, line 11. Selection of Killian's hyperlink does not result in "automatic programming of the media-based device to record the broadcast program" as recited in parent claim

1; it merely results in the display of the information at that hyperlink. See col. 5, lines 27-29.

Accordingly, claim 2, and its dependent claims 3-5, cannot be anticipated by Killian.

E. Killian Does not Disclose a One-Click Programming Method

1. Claim 3

Dependent claim 3 recites that selection of the advertisement and automatic programming of

the media-based device are invoked by one click on a hyperlink. This claim was rejected on the

ground that "Killian allows for various input devices, including a mouse and touch screen and teaches

the use of hyperlinks." See Final Office Action, at 3. The mere use of a mouse or touch screen to

select hyperlinks neither expressly nor inherently discloses that "one click on the hyperlink" will invoke

"automatic programming of the media-based device." Killian cannot anticipate claim 3.

2. Claims 20, 25

Claims 20 and 25 similarly recite that "the media-based device records the broadcast

program with one click \dots of the advertisement." Killian simply does not disclose a system in which a

broadcast program is recorded as a result of a single click on an advertisement, and claims 20 and

25 cannot be anticipated.

F. Killian Does not Disclose Keeping a Count of Hyperlink Selection

1. Claims 4-5

Claim 4 recites the step of "allowing the second website to monitor a count of a number of

times the hyperlink is selected." This claim was rejected on the ground that "it is inherent that

cookies are applied" in Killian's design. See Office Action, at 3. Even if the use of cookies were

inherent in Killian's design, there is no disclosure that any such cookies are inherently used in Killian's

system to monitor the number of times a hyperlink is selected. Accordingly, claim 4 and its

dependent claim 5 cannot be anticipated by Killian.

D. Conclusion

For at least the foregoing reasons, none of the pending claims are anticipated by Killian. The

Applicant respectfully requests that the rejections of claims 1-40 be reversed.

Respectfully submitted,

MCDONNELL BOEHNEN HULBERT & BERGHOFF LLP

Date: January 14, 2008 By: /Jeffrey A. Steck/

Jeffrey A. Steck Reg. No. 40.184

CLAIMS APPENDIX

 A method of programming a media-based device over a network, the method comprising: enabling an advertisement for a broadcast program to be provided on a first web site,

wherein the broadcast program is scheduled to be broadcast at a predetermined start time;

enabling selection of the advertisement; and

in response to selection of the advertisement, allowing automatic programming of the mediabased device to record the broadcast program at the predetermined start time.

- The method according to claim 1, wherein the advertisement comprises a hyperlink to a second web site capable of accessing the media-based device, the hyperlink being embedded in the first web site
- The method according to claim 2, wherein enabling selection of the advertisement and allowing automatic programming of the media-based device are invoked by one click on the hyperlink.
 - 4. The method according to claim 2, further comprising:

allowing the second website to monitor a count of a number of times the hyperlink is selected: and

enabling the second website to periodically collect revenue from the first website based on the count.

5. The method according to claim 4, wherein the revenue comprises a percentage of

advertising revenue associated with the advertisement.

6. The method according to claim 1, wherein the media-based device comprises a video $\,$

replay system.

7. The method according to claim 1, wherein enabling selection of the advertisement

comprises:

enabling identification of a user selecting the advertisement; and

enabling authentication of the user with the media-based device.

8. The method according to claim 7, wherein enabling identification of a user selecting the

advertisement comprises:

allowing identification of a cookie associated with the user; and

enabling the cookie to be forwarded to the media-based device.

9. The method according to claim 8, wherein the cookie is extracted from a client enabled to

communicate with the first website.

10. The method according to claim 8, wherein the cookie is extracted from a computer

hosting the first website.

11. The method according to claim 7, wherein enabling identification of a user selecting the

advertisement comprises:

enabling linking of the first web site to a second web site;

allowing navigation to the second web site; and

in response, the second web site enabling prompting of a user for identification data.

12. The method according to claim 7, wherein enabling identification of a user selecting the advertisement comprises:

enabling determination of a URL for the first web site; and

enabling determination of partner identification information associated with the first web site.

13. The method according to claim 1, wherein allowing automatic programming the mediabased device to record the broadcast program comprises:

enabling determination of a user associated with the media-based device;

allowing navigation from the first web site to a second web site; and $% \left(1\right) =\left(1\right) \left(1$

allowing the user to log into the second web site.

- 14. The method according to claim 1, wherein the advertisement comprises a clickable online advertisement for a broadcast program to be aired.
- 15. The method according to claim 14, where broadcast program comprises a television program.
- 16. The method according to claim 14, where broadcast program comprises a cable program.

 The method according to claim 14, where broadcast program comprises a pay-per-view program.

18. The method according to claim 14, where broadcast program comprises a satellitebased program.

19. A method of programming a media-based device to record content through a web-based application, comprising:

receiving a selection of an advertisement of a broadcast program to be aired at a predetermined start time;

extracting identification information associated with a user making the selection and with the broadcast program;

accessing a source web service in response to the user selection received; logging into the source web service using the identification information; and

the source web service programming the media-based device to record the broadcast program selected at the predetermined start time.

- 20. The method according to claim 19, wherein the media-based device records the broadcast program with one click from the user of the advertisement.
- 21. The method according to claim 19, wherein the advertisement comprises a clickable online advertisement for a broadcast program.

22. The method according to claim 19, further comprising: collecting revenue based on the advertisement selected.

 The method according to claim 19, wherein the media-based device comprises a digital video recorder.

24. A computer-implemented method for controlling a media-based device through a virtual browser, the method comprising the steps of the virtual browser:

receiving from a client system a selection of an advertisement of a broadcast program to be aired:

extracting identification information associated with a user making the selection and with the broadcast program;

accessing an online web service using the identification information; and invoking the media-based device to record the broadcast program selected, wherein the media-based device is different from the client system.

- 25. The method according to claim 24, wherein the media-based device records the broadcast program with one click of the advertisement.
- 26. The method according to claim 24, wherein the advertisement comprises a clickable online advertisement for the broadcast program.

27. The method according to claim 24, further comprising: collecting revenue based on the

advertisement selected.

28. The method according to claim 24, wherein the media-based device comprises a digital

video recorder

29. A method for programming a media-based device that is network enabled, comprising:

receiving from a client system a user command that causes a first server to access a second

server, the first server transmitting identifying information of the user to the second server;

the second server authenticating the user based on the identifying information, the second

server accessing the media-based device to program the media-based device with the identifying

information, wherein the media-based device is different from the client system.

30. The method according to claim 29, wherein the user command comprises the user

clicking on an online advertisement hosted by the first server.

31. The method according to claim 29, wherein the advertisement identifies a broadcast

program to be aired, and the identifying information comprises data related to the broadcast

program.

32. The method according to claim 29, wherein the media-based device comprises a digital

video recorder.

33. A system, comprising:

a client side system enabled to allow selection of an online advertisement for a broadcast

program while navigating a first web site, wherein the broadcast program is scheduled to be

broadcast at a predetermined start time, and

a server side system enabled to automatically program a media-based device to record the

broadcast program after selection of the online advertisement, the media-based device being

communicatively coupled to the server side system over a network in response to the advertisement

being selected.

34. The system of claim 33, wherein the media-based device comprises a digital video

recorder.

35. A browser program product for programming a media-based device over a network, the

browser program product being stored on a computer readable medium and adapted to perform the

operations of:

enabling an advertisement for a broadcast program to be provided on a first web site,

wherein the broadcast program is scheduled to be broadcast at a predetermined start time;

enabling selection of the advertisement; and

in response, allowing automatic programming of the media-based device to record the

broadcast program after selection of the advertisement.

36. The browser program product according to claim 35, wherein the media-based device

comprises a digital video recorder.

37. A computer server program product for programming a media-based device over a

network, the computer server program product stored on a computer readable medium, and

adapted to perform the operations of a virtual browser, comprising:

receiving a selection of an advertisement of a broadcast program to be aired at a

predetermined start time;

extracting identification information associated with a user making the selection and with the

broadcast program;

accessing an online web service using the identification information; and

invoking the media-based device to record the broadcast program selected at the

predetermined start time.

38. The computer server program product according to claim 37, wherein the media-based

device comprises a digital video recorder.

39. The computer server program product according to claim 37, wherein the

advertisement comprises a clickable online advertisement for the broadcast program.

40. The method according to Claim 13, wherein allowing automatic programming of the

media-based device to record the broadcast program, further comprises:

allowing detection of whether the user selected the advertisement previously; and

in response to the user previously not selecting the advertisement, enabling the second web site to communicate with the media-based device to record the broadcast program.

EVIDENCE APPENDIX

None.

RELATED PROCEEDINGS APPENDIX

None.